

During our revisionary studies on ferns (Hymenophyllaceae) in South India, we came across an interesting specimen from the evergreen forests of Thommankuthu in Idukki dist., on the foothills of the Western Ghats of Kerala. It was found on tree trunks just above ground level, covering the bark of trees near the Thommankuthu waterfall. The plant has slender, creeping, irregularly branched, blackish rhizomes, with pale green fronds. On comparing with literature, we identified it as *Microgonium sublimbatum* (C. Mull.) v.d.B. In India it is reported only from Khasia hills, Eastern Himalayas (Iwatsuki 1985). The specimens have been deposited in the Calicut University Herbarium (CALI).

Distribution: Himalaya (Khasia Hills), Burma (=Myanmar), Thailand, Indochina, Malesia.

Ecology: An extremely rare species growing

on moist tree trunks just above ground level.

Specimen examined: Thommankuthu forest, Idukki dist., Kerala; 27.xii.1996, Abdul Hameed CU 34802 (CALI).

Note: This taxon differs from *Microgonium henzaianum* (Parish ex. Hook.) which has dark green fronds, broadest near the apex, and involucres as wide as long. It lacks continuous submarginal false vein, which is the identifying character of *Microgonium bimarginatum*. According to Holttum (1954) and Copeland (1933), *M. sublimbatum* is larger than *M. bimarginatum*. But our specimen is almost the same size as that of *M. bimarginatum* collected from different parts of Kerala.

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33. PHENOLOGY OF *NAREGAMIA ALATA* (MELIACEAE) FROM WESTERN MAHARASHTRA

(With one plate)

Naregamia alata W. & A. (Meliaceae) is an endemic herb species in western Maharashtra. We observed it in the field and attempted its acclimatization in a nursery. The plant is under observation for the last three years. A change in the flowering character was recorded, which is presented in this communication.

During a botanical excursion to the coastal areas of Maharashtra, (Vengurla to Goa border area) we collected live specimens of *Naregamia alata* W. & A. (Meliaceae) on the way from Akeri

to Vengurla. From the literature, we found that the species is endemic and confined to selected areas on the west coast of India. In India it occurs only in the Western ghats from Konkan southwards (Dalzell and Gibson 1861, Hooker 1875, Cooke 1901, Gamble 1910, Almeida 1990). It is also recorded as a medicinal plant (Chopra *et al.* 1958).

Young plants of *Naregamia alata* were collected and kept for acclimatization in a nursery at the Agharkar Research Institute, Pune. The plants have thrived well. The recorded length of

TABLE 1

Observations	Habit	Leaves	Flowers	Fruits	Seed
Literature	Herb/Undershrub	Cuneate, obovate	Solitary 3-5 cm long		Brown, truncate
Field	Woody herb	Cuneate, trifoliate petiole winged	Not seen	3 valved 1-1.2 cm in diameter	Brown, truncate
Herbarium	Woody herb	Cuneate, trifoliate petiole winged	Solitary 2-3 cm long	3-valved 0.8-1 cm in diameter	Brown truncate
Nursery	Woody herb 20-30 cm high	Cuneate, trifoliate petiole winged leaflets obtusely lobed, terminal leaflets longer than lateral	2-3 axillary yellowish- white, 0.5-0.6 cm long, anthers orange, forming tube, stigma greenish white	Tri-cornered 0-8-1 cm in length	Brown 0-4-0.6 cm long, truncate at both ends

Flowering fruiting: October to December

Naregamia alata flowers is 3-5 cm. But the flower size in the nursery specimens differs from this appreciably. Materials from herbaria at the Botanical Survey of India Western Circle, Pune, Agharkar Research Institute, Pune, and National Botanical Research Institute, Lucknow were studied. Observations on exomorphic characters

were noted and are given in the table above.

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34. *DESMODIUM* DESV. (FABOIDEAE) IN EASTERN GHATS, INDIA: A SYSTEMATIC SURVEY

(With two text-figures)

The botany of the Eastern Ghats has not been adequately studied and no detailed Flora is available so far. The flora of Eastern Ghats of Orissa is covered by the work of Haines (1921), while Gamble and Fischer (1915-1935) reported on Andhra Pradesh and Tamil Nadu in his FLORA OF PRESIDENCY OF MADRAS. Recently Saxena and

Brahmam (1994), Ellis (1987), Subba Rao (1977), Pullaiah and Chennaiah (1997), Matthew (1993) and others have contributed to our knowledge of the flora in some selected regions of the Eastern Ghats. Mani (1974), Nayar *et al.* (1984) and Raju *et al.* (1987) reported on the vegetation and phytogeography, endemic and rare